

# Commentary

David C. Wheelock

**P**hil Strahan and various coauthors have written a series of significant papers on the impact of interstate banking and intrastate branching deregulation. His present paper summarizes and extends much of that research.<sup>1</sup>

I suspect that most economists would agree that draconian restrictions on branch banking or on the ability of bank holding companies to cross state lines make no sense. Geographic restrictions historically left the U.S. banking system vulnerable to regional economic shocks, limited banks' ability to exploit economies of scale and scope, sheltered weak banks from competition, and imposed costs on the consumers of banking services. Strahan's work attempts to *quantify* the impact of the removal of such restrictions on economic growth and entrepreneurial activity at the state level. His estimates are striking—for example, the removal of restrictions on branching appears to have increased the growth rate of state per capita incomes by about one-third, and the effect is persistent. He also estimates a marked increase in the rate of new business incorporations following deregulation, as well as a large decline in the volatility of state-level business cycles after interstate banking was permitted.

Economists and economic historians have long debated the effects of a country's financial system on its economic development. This commentary relates Strahan (2003) to other studies on the effects of geographic restrictions on banks, with a focus on historical comparisons. In addition, I raise some specific questions about Strahan's empirical analysis in the traditional discussant's role as devil's advocate.

## DOES FINANCIAL STRUCTURE MATTER?

Richard Sylla (1998) argues that, between 1780 and 1820, the emergence of a financial system

characterized by strong commercial banks, a deep capital market, and a sound currency set the United States apart from its Western Hemisphere neighbors and helps explain why the United States experienced rapid economic growth when other countries did not. Although commercial banks and securities markets did not arise or develop independently of one another, the degree of separation between the two and the importance of securities markets in the United States was unlike the financial systems of continental European countries, where banks dominated and securities markets were bit players.

The failure of powerful universal banks to emerge in the United States—and by extension, the reason why the U.S. capital market became so important—was the result, Calomiris (1995) argues, of restrictions on the ability of commercial banks to operate branches.<sup>2</sup> Calomiris argues that universal banks enjoy economies of scope by combining deposit-taking, trust services, lending, equity-holding, and underwriting. Hence, universal banks are uniquely able to meet the changing financial needs of corporations as they mature and, thus, provide an efficient means of financing a nation's economic development. In the United States, Calomiris claims, branching restrictions made it difficult for commercial banks to grow sufficiently in size to meet the financial needs of large-scale enterprises, and, consequently, he argues that the cost of capital was higher in the United States than it would have been with a system of universal banks with nationwide offices (such as in the German banking system).

<sup>1</sup> See Strahan (2003) for references.

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<sup>2</sup> With the exceptions of the First and Second Bank of the United States, which were federally chartered and operated offices throughout the country, before the Civil War all U.S. banks were chartered by state governments. A few southern states permitted banks to branch, but most states did not; furthermore, state-chartered banks were never permitted to operate branches across state lines. The charters of both the First and Second Banks were both allowed to expire after 20 years of operation, and no bank operated interstate branches after 1836. The National Bank Act of 1863, which established the Office of the Comptroller of the Currency and provided for federal bank chartering, was interpreted as prohibiting interstate branching. The McFadden Act of 1927 further restricted branching by national banks.

## ARE BRANCHING BANKS MORE STABLE?

Calomiris's (1995) contention—that branching restrictions increased the cost of capital in the United States and, presumably, held back the rate of economic growth—is difficult to test and not universally agreed upon (e.g., see Fohlin, 1998). Much more widely accepted is the view that branching restrictions were an important cause of instability in the U.S. banking system. Friedman and Schwartz (1963) contend that branching restrictions left the U.S. banking system especially vulnerable to banking panics, such as those occurring during the Great Depression. Canada, by contrast, had a banking system consisting of a small number of large banks with nationwide branches and suffered no banking panics during the Depression. Grossman (1994) also finds that panics were less likely to occur during the Depression in countries that had nationwide branch banking.

Within the United States, Wheelock (1995) and Mitchener (2002) find that during the Depression bank failure rates were lower in states that permitted some branching. Interestingly, Calomiris and Mason (2000) and Carlson (2001) find that branching *increased* the probability of failure for individual banks, controlling for bank size and other specific characteristics. Both Calomiris and Mason (2000) and Carlson and Mitchener (2002) suggest that prior acquisitions by branching banks might explain why branching seems to have increased the probability of failure for individual banks while average failure rates were lower in states that permitted branching. Calomiris and Mason (2000) note that some branching banks had engaged aggressively in acquisitions during the late 1920s, and the estimated positive effect of branching on the probability of failure for individual banks during the 1930s might reflect the costs of acquiring distressed banks in prior years.

Carlson and Mitchener (2002) conclude that the expansion of branching during the 1920s increased competition and drove out of existence many weak banks in formerly protected markets either by failure, voluntary liquidation, or merger. Hence, once the Depression hit, the average bank—regardless of whether it had branches—was stronger in states that permitted branching than in other states, resulting in a lower state bank failure rate. Carlson (2001) finds that branching banks tended to maintain lower reserve ratios than other banks, however, which might explain why branching appears to have

increased the probability of failure for individual banks.

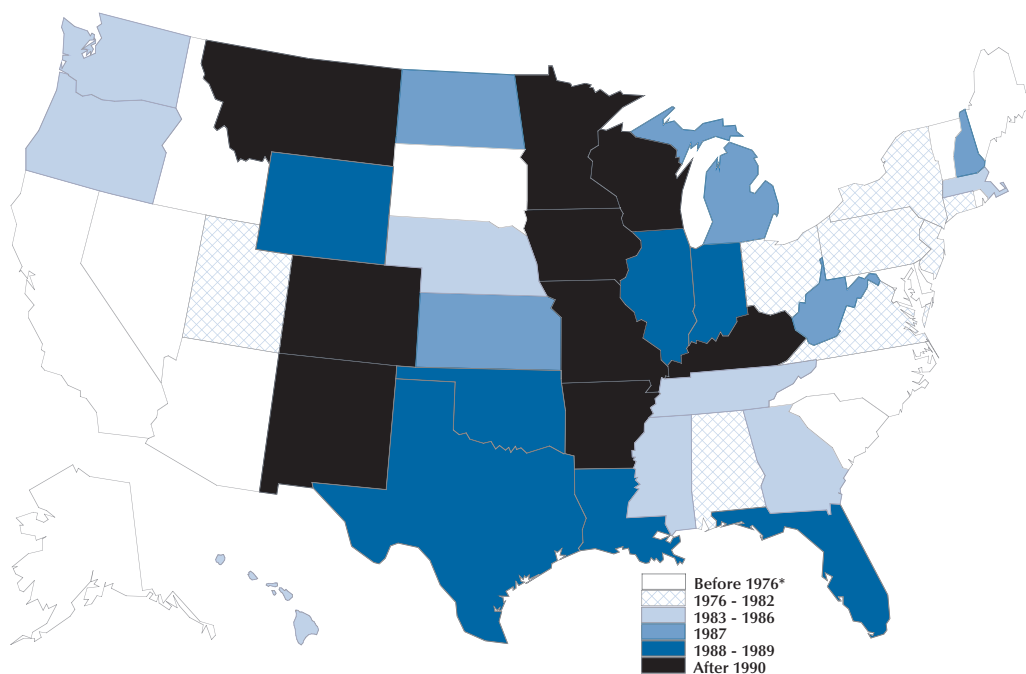
## THE EFFICIENCY OF BRANCH BANKING SYSTEMS

Although banking systems that consist of a small number of large banks with nationwide branches have been more stable historically, the question arises whether such systems are efficient. Although Strahan (2003) finds that deregulation has not increased bank market concentration in the United States, many countries that permit nationwide branching have highly concentrated banking systems. Cetorelli and Gambera (2001) find that increasing market concentration raises the cost of bank loans for firms and retards economic growth. Bordo, Redish, and Rockhoff (1995), however, find that interest rates on loans between 1920 and 1980 were not higher in Canada, which has a highly concentrated banking system, than in the United States. They also find that interest rates paid on deposits were higher in Canada. Although Canadian banks had a higher average rate of return on equity than U.S. banks, Bordo, Redish, and Rockhoff (1995) attribute this to scale economies and the Canadian system's stability rather than to the exercise of monopoly power.

Although Cetorelli and Gambera (2001) and other studies have investigated the effects of bank market concentration on economic growth, I am not aware of any studies other than Strahan's work that directly test the effects that branching, per se, or changes in branching laws have on growth. Friedman and Schwartz (1963) note that, although Canada had no banking panics, the percentage declines in Canadian and U.S. gross domestic product (GDP) during the Depression were similar. Moreover, U.S. states that permitted branch banking seem not to have fared any better during the Depression than did other states. These studies focus on a short and unusual period, however, and provide little evidence of the impact of branching in general. Strahan's studies of the real economic effects of intrastate branching and interstate banking deregulation are thus unique and important.

## SPECIFIC COMMENTS ON STRAHAN (2003)

Strahan's (2003) estimates of the impact of deregulation on economic growth are large: He finds that removing restrictions on statewide branching increased the average growth rate of state real per

**Figure 1****When Banks Permitted Intrastate Branching**

NOTE: \*Delaware and South Dakota are excluded.

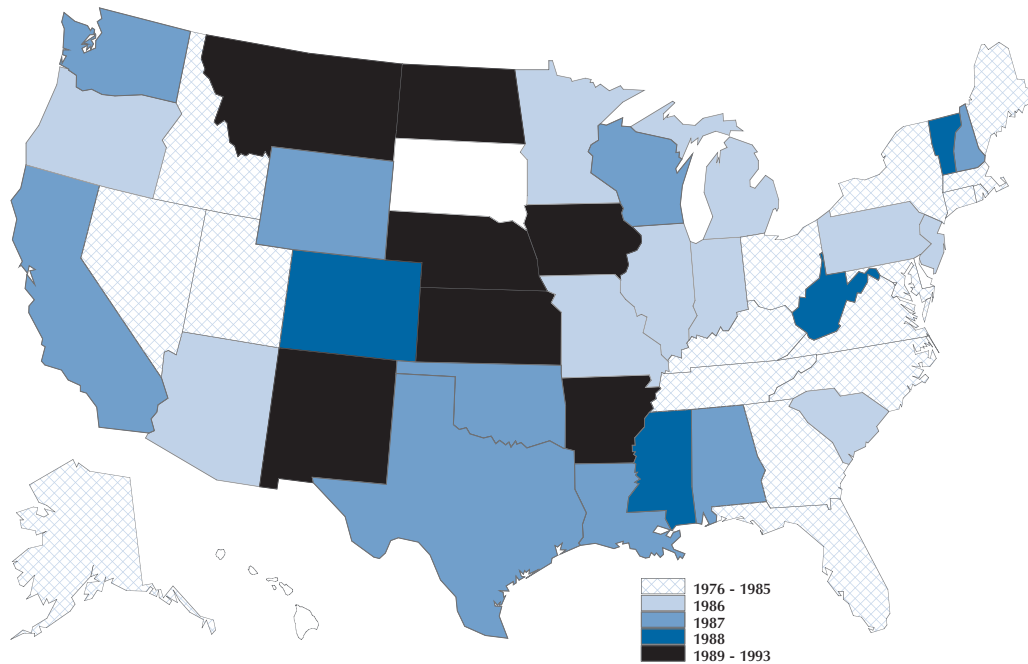
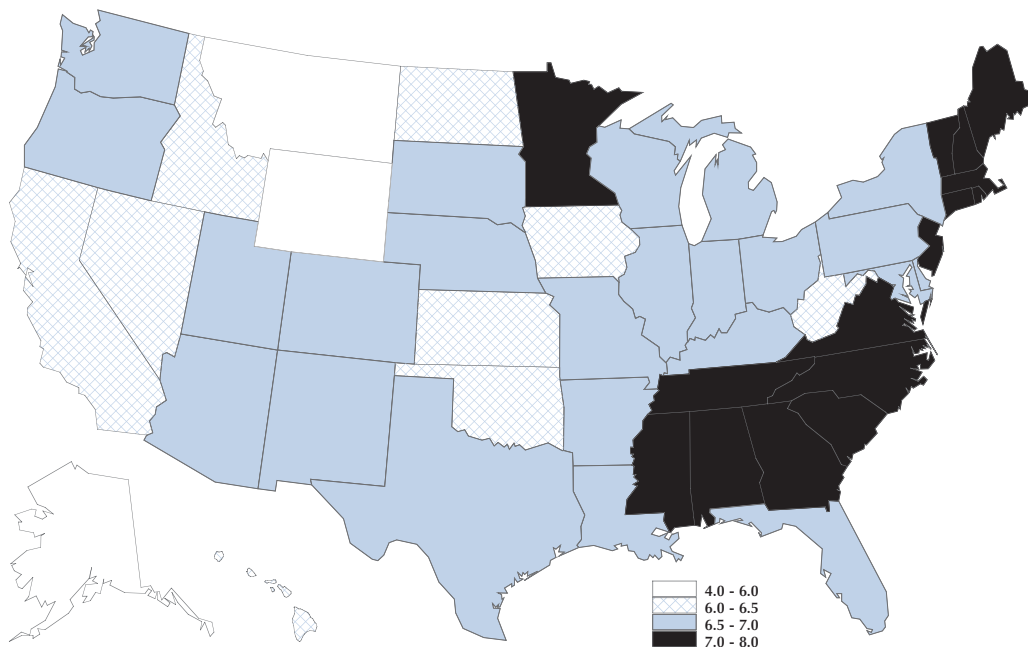
capita income by 33 percent and that the effect on growth remained as high five years after deregulation. Kroszner and Strahan (1999) investigate the determinants of deregulation and conclude that technological changes created strong pressure for deregulation, while the timing of deregulation in specific states was determined by the relative strengths of pro- and anti-deregulation constituents. Importantly, they find no evidence that deregulation occurred in anticipation of future economic growth. Freeman (2002), however, shows that states tended to deregulate when they were growing below trend, suggesting that the choice of branching regime was not independent of income growth. Freeman shows further that when three- or five-year intervals surrounding the year of deregulation are eliminated from the estimation of Strahan's model, the estimated impact of the removal of intrastate branching restrictions on growth is smaller than what Strahan reports.

A correlation between deregulation and state per capita income growth is evident in Figures 1 through 3. Figures 1 and 2 show the dates when states removed restrictions on intrastate branching

and interstate banking. In Figure 1, states that are not shaded include those permitting statewide branching before 1976 (the first year in Strahan's, 2003, empirical analysis), plus Delaware and South Dakota, which Strahan excludes.<sup>3</sup> Other states are shaded in groups according to when they enabled statewide branching. In Figure 3, states are shaded according to annual average growth in state per capita income during 1976-96, the years encompassed by Strahan's empirical work. By comparing the three maps, one notes that average growth tended to be higher in states that deregulated earlier. One also notes regional patterns in the timing of deregulation and average growth rates. States in the South and New England tended to deregulate earlier than Midwestern states, and several of these had among the highest average annual growth rates.

The regional patterns in the timing of deregulation and growth rates suggest possible spatial correlation among either or both variables. Spatial

<sup>3</sup> Delaware and South Dakota are omitted because the presence of several large credit-card banks in each state distorts banking and growth data. These states are not shaded in Figure 2 for the same reason.

**Figure 2****When Banks Permitted Interstate Banking****Figure 3****Average Per Capita Income Growth Rate, 1976-96**



correlation arises if, say, the decision of one state to adopt a particular branching law is affected by another state's choice. Or, it would arise if the growth rate of one state is affected by the growth rate of another state. In the former case, an independent variable in Strahan's (2003) model would exhibit spatial correlation. In the latter case, the dependent variable would exhibit spatial correlation. Failure to account for spatial correlation in an independent variable will result in inefficient coefficient estimates. Failure to account for spatial correlation in a dependent variable, however, can lead to biased estimates.<sup>4</sup> Observed regional patterns do not necessarily mean that variables are spatially correlated, but do suggest the need for additional testing.

The removal of intrastate branching and interstate banking restrictions in the United States provided a natural experiment of the effects of changes in banking market structure on real economic activity. Strahan's comprehensive analysis shows that deregulation had significant positive effects on economic activity. Although additional econometric work might reduce the magnitude of the effects he finds, Strahan's work will remain important as a comprehensive analysis of the causes and effects of banking deregulation.

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<sup>4</sup> See Anselin (1988).

